COTTON CHATS

TRADE MARK REG U S PAT OFF AND IN CANADA
PRINTED IN U S A

DRAPER CORPORATION HOPEDALE MASS

NUMBER 330 JUNE 1938

Larger Yarn Beams Save 35 to 100% on Investment

Would you invest a few thousand dollars where you could see an annual return on your investment of from 35 to 100 per cent?

You have seen the textile margin of profit worn to a near vanishing point between present day rising costs of production and the low prices your product brings in the thin markets of today.

You would like to widen that margin of profit.

Some mills are doing it through a small investment in loom parts that will enable them to run longer warps.

Larger beam heads and longer warps are the trend in the industry today.

Where they have been installed they are paying a handsome yearly return on a small investment.

They offer the chance to widen your mill's margin of profit.

More Yarn On Beams

The saving comes from the larger quantity of yarn on the beam, in the cost of tying in a smaller number of warps, the cost of putting fewer beams in the loom, the reduced waste at both slasher and loom, and an increase in loom hours due to less time out for changing warps.

The increase in yarn on the beam through a change from a smaller to a larger beam head is as follows:

Changing	15″	to	20″	Beam	gives	92.6 %	More Yarn
"	16″	"	20″	"	"	65.45%	" "
"	16 5/8″	"	20″	"	"	51.42%	" "
"	18″	"	20″	"	"	26.39%	" "
"	18″	"	22″	"	"	55.56%	" "
"	18″	"	24″	"	"	87.5 %	" "
"	20″	"	22″	"	"	23.07%	" "
"	20″	"	24″	"	"	48.35%	" "

These figures are based on use of a 6″ barrel.

Where 6″ barrels replace 5″ the increase in yarn is somewhat less and the cost more because of new barrels.

The Easy Change from 18″ to 20″

Where mills do not have to relocate the looms, and the number of warp hands and auxiliary help is enough to allow for a proportional reduction when less beams are required for the amount of warp handled, the saving on drawing-in, on warp handlers and on waste totals about 100 per cent per year on the investment.

And this takes no account of the gain in loom hours and reduction of seconds due to starting fewer beams.

On a change made recently from 18″ to 20″ beams on 500 looms at a cost of $4000 the annual saving was equal to the investment. The gain in loom hours was good for more than 27,000 yards of cloth extra.

On similar changes at other mills the results were about the same.

These are the easier changes to make and naturally the more profitable.

Where Looms Are Relocated

If looms must be relocated, the cost may reduce the annual return from around 100 per cent to from 35 to 50 per cent — still a rather profitable transaction.

On a recent change from 15″ to 20″ beams on 1128 E and K Models, the looms had to be relocated at a cost of $5640 and new 6″ beam barrels replaced the 5″.

The total cost of the change was $25,214.74.

The direct saving on drawing-in and warp handlers for more than 5000 less beams per year was $15,422.00.

The mill did not give us the figures on saving on waste or the gain in loom hours. These would add to the savings on labor.

On a change from 16″ to 22″ beams on 1500 looms — mostly L Models — it was necessary to relocate the looms, shafting and electrical connections.

The cost was $64,500 and the annual saving $20,719.

The saving on waste allowed was below what it will work out, and no increase in loom hours was figured.

Figure It Out for Your Mill

What can your mill save by using larger beams?

A Draper man will tell you.

His estimate will be based on figures you supply on what you are now doing. It will not be guess work.

For a rough idea of possible savings before asking for a complete estimate, follow these simple rules:

From our table on page 2 find per cent of increase in yarn per beam for the change you have in mind.

For example, from an 18″ to 20″ beam gives 26.39% more yarn per beam. Take 25% for easy figuring.

With 25% more yarn on the beam you would use only four beams where you now use five.

You know how many beams you handle in a year. You would save the expense of handling one-fifth of these.

You know what it costs to draw in a beam.

Figure the saving.

You use warp changers, smash hands, room girls and helpers in starting a new beam.

Figure the saving on one-fifth less beams.

You know, or can find out the waste per beam in the slasher room, in starting the beam in the loom, in yarn left on the beam.

The cost of the yarn on the beam less the price as waste is your loss per beam for waste.

Figure the saving on one-fifth less beams.

You know how long your looms stop for putting in a warp and how much cloth a loom could weave in that time.

Multiply by the number of beams saved and you have the yardage you get from your extra loom hours.

Add up the savings.

Get from us the cost of loom parts for the change.

Now do a little figuring on the handsome income you are going to get on the investment.

More Yarn per Beam on New Looms

X Family looms are built to take 22" and even 24" beams. They take larger rolls of cloth and larger yarn diameter on the bobbin.

Larger yarn packages are one of the advantages of these looms.

The savings they allow may be added when figuring the profits of installing these new type looms to the increased production of high speed looms and the better cloth they weave.

And these savings are greater than the savings you get from larger beams on old looms.

Naturally many mills prefer the direct course to more yarn per beam by buying new looms of the X Family.